INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF RECLAMATION

COMPLIANCE INSPECTION REPORT

	of Last Inspection 08/31/2011 F Fair; Ground Firm							
X S-354 Peabody Midwest Mining, LLC - Somerville	East Mine							
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INSPECTION CHECKLIST: Indicate compliance code for	items checked. Items marked (S) were							
satisfactory. For any items marked (X), provide a na								
determination. Items marked (NA) are not applicable	to this inspectable unit.							
X 1. Areas Permitted, Bonded, or Unsuitable.								
S 2. Signs and Markers, Survey Corner Markers. NA 3. Operations, Coal Recovery, and Cessation o	of Operations							
NA 4. Backfilling and Grading, Contemporaneous R								
NA 5. Topsoil, Alternate Material, and Prime Far								
X 6. Revegetation/Rills and Gullies, and Slides								
X 7. Post-Mining Land Use, Fish and Wildlife Mi								
X 8. Hydrologic Balance.								
NA 9. Disposal of Coal/Non-Coal Waste, and Exces	s Spoil.							
NA 10. Auguring, Processing, and Steep Slopes.	-							
NA 11. Transportation and Support Facilities - Ut	ility Install.							
NA 12. Casing/Sealing Exposed Underground Opening	s.							
NA 13. Subsidence Control Prevention.								
S 14. Liability Insurance Expires 11/01/2011								
X 15. Bond Release Information.								
X 16. Other Permit and Site Conditions: NPDES	#ING0040206 Water Monitoring							
S 17. Off-Site Impacts Noted (Y/N) N .	WED to this inspection \							
(If yes, attach off-site impact form as CC	VER to this inspection.							
***********	*********							
Responsible Official & Address:	Copy Issued To:							
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Mr. Greg Olinger	Not Issued on Site							
UMI, LLC CC:	Peabody Midwest Mining, LLC							
P.O. Box 400	7100 Eagle Crest Blvd, Ste 100							
Huntingburg, IN 47542	Evansville, IN 47715							
Signature 2 - 100	Data: Captambar 15 2011							
Signature: Yumah Glom Authorized Representative	Date: September 15, 2011							
Division of Reclamation								

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Signature of Co. Rep. Not Completed on Site Permittee Peabody Midwest Mining, LLC Mine Somerville East Mine Unit # 417 County Pike Date of Insp. September 13, 2011 Time 09:00 AM

COMMENTS:

This inspection was conducted with United Minerals representative Terry Kissel and DNR Fish & Wildlife biologist Ramona Briggeman for the purpose of assessing the success of forest and fish & wildlife reclamation. The bond release inspection itself is scheduled for 10:00 AM Eastern, 9:00 Central on Tuesday, September 20, 2011. The text of this report is focused on the east side of HWY 61 in the FC#1 field. The west side of HWY 61 in the FC#2 field will be inspected on September 20, 2011 as part of the bond release inspection.

1. Areas Permitted, Bonded, or Unsuitable

A. The S-354 permit acreage is broken down as follows:

Permitted acreage: 926.9 acres Phase I (grading) retained: *13.7 acres *38.3 443.2 acres Phase II (reveg) retained: Bonded Acreage: Phase III (final) retained: *443.2

- * 9.9 acres are being requested for phase I, 29.3 for phase II, and 92.5 acres for phase III.

 B. The Army Corps of Engineers issued Nationwide Permit (NWP) authorization under 33 CFR 330, No. 21 (404 permit) for the Somerville East operation on May 8, 2006.
- 6. Revegetation/Rills and Gullies, and Slides.
- 7. Post-Mining Land Use, Fish and Wildlife Mitigation
- 15. Bond Release Information.

Ms Briggeman made the following recommendation for forest and wildlife areas requested for bond release:

> The area has been reclaimed in accordance with the approved plan of reclamation. Tree counts indicate 471.43 trees per acre have been established, which exceeds the required 450 stems per acre. Trees have been in place for at least three growing seasons. Revegetation Phase II release and Final Phase III release is recommended for all the forest and wildlife areas.

The following text is consistent with Ms Briggeman's supporting written comments that will be attached to the Jasonville File copy of the bond release packet:

- A. The understory is stable with orchard grass, perennial rye, white clover, red clover, partridge pea and annuals in the species mix. Mowing was recently completed between the rows of trees to reduce competition and mouse/vole cover while increasing litter for soil protection. Also found is sudex grass that was used as green mulch.
- B. The Forest and Wildlife land uses are well vegetated with a mixture of tree and shrub species including various oak sp. (red, white, swamp white, bur), hickory, bald cypress, pecan, walnut, ninebark, sycamore, tulip poplar, sweetgum, dogwood, buttonbush, river birch, maple, pine, persimmon, and others. Some volunteer species are also coming in, including cottonwood, willow, sycamore, maple and black locust. The understory, containing red top, orchard grass, perennial rye, red clover, partridge pea and annuals remains stable. Establishment and growth is good to very good throughout.
- C. Wildlife areas are vegetated similarly to the forest areas. There is an area of warm season grass planted in switch grass.
 - Stream reaches constructed within the FC #1 landscape appear to be developing

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COMMENTS:

- well. Older streams are constructed with meanders, pools, riffles and other structures valuable in a wildlife land use. Piles of Rip rap remain for additional construction when field conditions allow access. Concrete barriers also remain at the former entrance off SR 61 and near the outfall of Triad's Basin ASB35 if needed for stream construction.
- 2. The lay of the vegetation in the main stream channel on the east side of SR 61 indicates some recent significant flows have been handled well. Erosion is minimal in part because heavier sediment has dropped out along the way creating smaller riffles that hold back water flow to a more sustained flow. Root balls positioned at stream bends are also doing a good job of minimizing erosion. Several smaller wetlands have formed along the stream path and behind restraining brush piles that are host to all manner of frogs, red wings, raptors, etc. Mud flats with cattails are also becoming established.
- 3. Larger marshes exist as shallow water bodies with sedges, rushes, willows, cattails, cottonwoods, bald cypress and other wetland species along with some deeper water areas. There are some bare areas present at this time where the water has receded due to the extremely dry time of the year.
- 4. Work has been completed over the last month or two to improve groundcover on spotty areas and sites where erosion had occurred. The repair crew has done a good job of locating and making repairs at erosion sites along the main stream channel.
- 5. The outfall of basin SE-5S has been reworked to help contain erosion without impeding its function of extending stream flow after a rain event.
- D. Prime farmland is planted in corn.
- 8. Hydrologic Balance
- 16. Other Permit and Site Conditions: NPDES #ING0040206 Water Monitoring
 - A. A review of the available surface and ground water data on file with the Division of Reclamation indicates contamination of surface and ground water resources by potentially acid/toxic forming materials has been avoided.
 - B. Drill logs and other information included in the S-354 permit do not indicate the presence of any significant ground water resources within the permit area.
 - 1. What ground water resources that are present are monitored by means of one ground water well (GMM-1) through phase III release. Reports have been received up to and including April 2011.
 - 2. GWM-2 was monitored through July 2005 after which it was mined through by the adjoining Triad South Augusta mine (S-353). Restoration of this well is not required and data collection from this well is finished.
 - 3. Ground water monitoring for residential well #10 was concluded with the August 2009 report.
 - C. Surface water is controlled through basins EL-27, EL-28, and NPDES outfalls at basins EL-22, SE-9S (aka Turkey Flight Lake), SE-12S, and EL-17 (phase II). Basins EL-27 and EL-28 are sediment control structures that have been shown to not discharge. All NPDES points are in reclamation status (quarterly).
 - Reports for SE-9S, SE-12S, FC-2, EL-17, and EL-22 have been received through April 2011 (2nd quarter). NPDES reports received to date indicate continuing compliance with Federal and State effluent limits.
 - 2. Each of the above named sediment ponds have been certified. Also,

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COMMENTS:

certifications of Salt Lick Lake, FC-2, FC-1, and basins SE-5S, SE-6S, SE-8S, SE-10S, SE-11S, and SE-13S (not NPDES points) have been submitted and approved. All impoundments are exempted from annual examination reporting requirements of 312 IAC 25-6-20(9)(E).

- 3. Basin discharge will be tested during the upcoming bond release inspection.
- D. Two surface water stations, R-75 and R-66, are monitored quarterly through final bond release for total dissolved solids or specific conductance, total suspended solids, pH, total iron, total manganese, and flow.
 - 1. Reports for these stations have been received through April 2011.
 - 2. The DoR Water Quality Specialist reviewed the stream data and determined that pre-mining surface water quality has not been compromised by the S-354 mining operation.

Signature

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COMMENTS:

16. Other Permit and Site Conditions: NPDES Water Monitoring.

See upcoming report dated 9/20/2011.

206		d						
NPDES Outfall	NPDES Status	Discharge	Flow rate	pΗ	Iron Mg/I	Settable solids	Insp Date	
EL17	ALK							
022S	ALK						Ditto	
009S	ALK						Ditto	
012S	ALK						Ditto	
								-
	Status: UND ALK ACID	Discharge: Yes No	Flow: Trickle (T) Low (L) Moderate(M)					
	Outfall EL17 022S 009S 012S	NPDES Outfall Status EL17 ALK 022S ALK 009S ALK 012S ALK Status: UND ALK	NPDES Outfall Status EL17 ALK 022S ALK 009S ALK 012S ALK UND Discharge: VND ALK No ACID	NPDES Outfall Status EL17 ALK 022S ALK 009S ALK 012S ALK UND Status: UND ALK No ACID Status: Discharge: Yes No ALK No ACID Flow rate Flow rate Flow rate	NPDES Outfall Status Discharge Flow rate pH EL17 ALK 022S ALK 012S ALK 012S ALK UND Flow Flow: UND ALK Yes No ALK No Moderate(M)	NPDES Outfall Status EL17 ALK 022S ALK 009S ALK 012S ALK UND Status: UND ALK No ACID Status: Ves No ACID Discharge Flow rate PH Iron Mg/I	NPDES Outfall Status Discharge Flow rate pH Iron Mg/I solids EL17 ALK 022S ALK 009S ALK 012S ALK 012S ALK 11	NPDES Outfall Status EL17 ALK 022S ALK 012S ALK 013S

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